

WHAT IS CLAIMED IS:

1. A B cell epitope peptide comprising the amino acid sequence as denoted by SEQ ID NO:1.

2. A B cell epitope peptide as claimed in claim 1 having the amino acid sequence as denoted by SEQ ID NO:2.

3. A B cell epitope peptide as claimed in claim 1 having the amino acid sequence as denoted by SEQ ID NO:3.

4. A B cell epitope peptide comprising the amino acid sequence as denoted by SEQ ID NO:4. ✓

5. A B cell epitope peptide as claimed in claim 1, being a synthetic peptide.

6. A chemically modified peptide according to claim 5.

7. A B cell epitope peptide as claimed in claim 1 capable of conferring immunity against autoimmune and/or inflammatory disorders.

8. A nucleic acid sequence encoding a B cell epitope peptide as claimed in claim 1.

9. A DNA sequence as claimed in to claim 8.

10. A DNA sequence as claimed in claim 9 comprising the nucleic acid sequence as denoted by SEQ ID NO:5.

11. A DNA construct comprising a nucleic acid sequence as claimed in claim 8.

12. A DNA construct comprising the DNA sequence as claimed in claim 9.

13. A vaccine comprising as active ingredient an effective vaccinating amount of at least one B cell epitope peptide as claimed in claim 1, optionally further comprising pharmaceutically acceptable carrier, diluent, additive or adjuvant.

1 14. A vaccine comprising as active ingredient a DNA sequence as claimed in claim 1,
2 optionally further comprising a pharmaceutically acceptable carrier, diluent, additive or
3 adjuvant.

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1 15. A vaccine as claimed in claim 13, for conferring immunity against autoimmune or
2 inflammatory disorders.

1 16. The vaccine as claimed claim 15 for conferring immunity against arthritis.

1 17. An antibody directed against a B cell epitope peptide comprising the amino acid
2 sequence as denoted by SEQ ID NO:1. ✓

1 18. An antibody directed against a B cell epitope peptide having the amino acid sequence
2 as denoted by SEQ ID NO:2. ✓

1 19. An antibody directed against a B cell epitope peptide having the amino acid sequence
2 as denoted by SEQ ID NO:3. ✓

1 20. An antibody directed against a B cell epitope peptide comprising the amino acid
2 sequence as denoted by SEQ ID NO:4. ✓

1 21. A composition for the passive immunization against an autoimmune or inflammatory
2 disorder comprising a pharmaceutically effective amount of an antibody as claimed in
3 claim 17.

1 22. A composition as claimed in claim 21, for the prevention or treatment of autoimmune
2 or inflammatory disorder.

1 23. A method for predicting the susceptibility/predisposition of an individual to arthritis
2 by testing a sample of serum from said individual for the presence of antibodies directed
3 against a peptide as claimed in claim 1, by suitable immunoassay techniques.

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